



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

First Named Inventor	: Peter Crane	
Appln. No.	: 10/051,366	
Filed	: January 18, 2002	Group Art Unit: 2652
Title	: MOVING COIL MICRO ACTUATOR WITH REDUCED ROTOR MASS	Examiner: Tupper, Robert S.
Docket No.	: I69.12-0514	

**EXPRESS MAIL COVER SHEET**

Mail Stop Issue Fee  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**SENT VIA EXPRESS MAIL**  
Express Mail No.: EV 004176569 US

Sir:

The following papers are being transmitted via **EXPRESS MAIL** to the U.S. Patent and Trademark Office on the date shown below:

1. Postcard
2. Check for \$1,600.00
3. Fee Transmittal (In duplicate)
4. Part B Fee(s) Transmittal
5. Comments on Statement of Reasons for Allowance

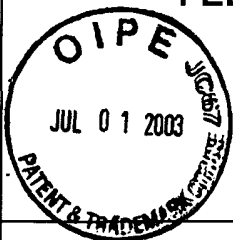
Respectfully submitted,

KINNEY & LANGE, P.A.

Date: 7/1/03

By Gayle A. Bush  
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# FEE TRANSMITTAL



Total Amount of Payment \$1,600.00

## Complete if Known

Application No.	10/051,366
Filing Date	January 18, 2002
First Named Inventor	Peter Crane
Group Art Unit	2652
Examiner Name	Tupper, Robert S.
Atty. Docket Number	169.12-0514

## METHOD OF PAYMENT (Check One)

1. ☒ The Commissioner is hereby authorized to charge any additional fee required under 37 C.F.R. 1.16 and 1.17 and credit any over payments to Deposit Account No.11-0982. Deposit Account Name: Kinney & Lange, P.A. A duplicate copy of this communication is enclosed

2. ☒ Check Enclosed

## FEE CALCULATION

### 1. BASIC FILING FEE

Large Entity Fee Code	Large Entity Fee (\$)	Small Entity Fee Code	Small Entity Fee (\$)	Fee Description
1001	750	2001	375	[ ] Utility Filing Fee
1006	330	2006	165	[ ] Design Filing Fee
1004	750	2004	375	[ ] Reissue Filing Fee
1005	160	2005	80	[ ] Prov. Filing Fee

Subtotal (1) \$0-

### 2. EXTRA CLAIM FEES

	Number Claims	Prior	Extra	Fee from Below	Fee Paid
Total	-	=	X	=	-
Indep.	-	=	X	=	-
Multiple Dependent Claims		=		=	-

Insert 3 and 20, or number previously paid if greater; Reissue see below

Large Entity Fee Code	Large Entity Fee (\$)	Small Entity Fee Code	Small Entity Fee (\$)	Description
1202	18	2202	9	Claims in excess of 20
1201	84	2201	42	Independent claims in excess of 3
1203	280	2203	140	Multiple Dependent Claim
1204	84	2204	42	Reissue Independent Claims Over Original Patent
1205	18	2205	9	Reissue claims in excess of 20 and over original patent

Subtotal (2) \$0-

## FEE CALCULATION (Continued)

### 3. ADDITIONAL FEES

Large Entity Fee Code	Large Entity Fee (\$)	Small Entity Fee Code	Small Entity Fee (\$)	Fee Description	Fee paid
1051	130	2051	65	Surcharge - Late filing fee or oath	-
1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet	-
1053	130	1053	130	Non-English specification	-
1812	2,520	1812	2,520	For Filing a Request for Reexamination	-
1251	110	2251	55	Extension for reply within first month	-
1252	410	2252	205	Extension for reply within second month	-
1253	930	2253	465	Extension for reply within third month	-
1254	1,450	2254	725	Extension for reply within fourth month	-
1255	1,970	2255	985	Extension for reply within fifth month	-
1402	320	2402	160	Filing a brief in support of an appeal	-
1403	280	2403	140	Request for oral hearing	-
1814	110	2814	55	Terminal Disclaimer Fee	-
1452	110	2452	55	Petition to revive - unavoidable	-
1453	1,300	2453	650	Petition to revive - unintentional	-
1501	1,300	2501	650	Utility/Reissue issue fee	1300
1502	470	2502	235	Design issue fee	-
1460	130	1460	130	Petitions to the Commissioner	-
1807	50	1807	50	Petitions related to provisional applications	-
1806	180	1806	180	Submission of Information Disclosure Statement	-
8021	40	8021	40	Recording each patent assignment per property (times number of properties)	-
1801	750	2801	375	Request for Continued Examination (RCE)	-

Other fee (specify) Publication Fee

300

Subtotal (3) \$1,600.00

Signature

*Gayle A. Bush*  
Gayle A. Bush

Reg. No.

52,677

Date

7/1/03

Deposit Account No.

11-0982



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**COMMENTS ON STATEMENT OF REASONS FOR ALLOWANCE**

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Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

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Express Mail No.: EV 004176569 US

Sir:

Applicant disagrees with the Statement of Reasons for Allowance. The Statement of Reasons for Allowance indicate that the term microactuator be read in light of the disclosure as being a voice coil motor. As shown in FIGS. 1 and 2 and discussed in the specification, the voice coil motor (VCM) and the microactuator are two separate structures. VCM, or the main actuator, is arranged to rotate an actuation arm on a spindle around an axis. A load beam is connected to the actuator arm and a gimbal is connected to an end of the load beam. A microactuator positions the slider with respect to the gimbal. The microactuator is attached to the gimbal and carries the slider.

As discussed at page 5, lines 3-10, the VCM coarsely positions the slider by moving the actuator arm and the microactuator finely positions the slider by generating a force which causes bending of the beam springs located on the microactuator resulting in the portion of the microactuator carrying the slider moving slightly with respect to the gimbal.

Thus, Applicant disagrees with Examiner's statement that the term microactuator is read in light of the disclosure as being a voice coil motor. The voice coil motor and the microactuator are separate actuators which coarsely and finely, respectively, position the slider. Applicant respectfully requests that these comments be entered in the application file.

Respectfully submitted,

KINNEY & LANGE, P.A.

Date: 7/1/03

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